

Chapter 5 — Consultation, Permit, and Review Requirements

In this Chapter:

- **Laws and procedures to follow**
- **Consultations**
- **Permits**

Several federal laws and administrative procedures must be met by the alternatives. This chapter lists and briefly describes requirements that would apply to elements of this project, actions taken to ensure compliance with these requirements, and the status of consultations or permit applications. This EIS was sent to tribes, federal agencies, and state and local governments as part of the consultation process for this project.

5.1 National Environmental Policy Act

This Final EIS was prepared according to the National Environmental Policy Act (NEPA) (42 USC 4321 et seq.). NEPA is a national law that establishes an environmental policy. This policy requires that an interdisciplinary framework be used in environmental planning, ensures that federal agencies study the environmental effects of their actions, and provides full public disclosure and open decision-making on the part of federal agencies (Bass, Herson and Bogdan, 2001). NEPA applies to all federal projects or projects that require discretionary federal involvement. BPA considers potential environmental consequences and which actions it may take to avoid, minimize, or compensate for potential harm from its proposed action to the environment. BPA would also provide the public opportunities to review and input into the decision-making process.

5.2 Endangered and Threatened Species

The Endangered Species Act (ESA) of 1973 (16 USC 1536) provides for conserving endangered and threatened species of fish, wildlife, and plants. Federal agencies must determine whether proposed actions would adversely affect any federally listed endangered or threatened species. When conducting an environmental impact analysis for specific projects, agencies must identify practicable alternatives to conserve or enhance such species.

BPA received letters from the USFWS, dated March 14, 2001, and June 18, 2002, that listed the endangered and threatened species that could be potentially affected by the project. Information from

the National Marine Fisheries Service (NMFS) on listed endangered and threatened species was obtained through current lists published on the agency's website. ESA regulations require that a Biological Assessment be prepared to identify any threatened or endangered species that are likely to be impacted by major construction activities. A Biological Assessment has been prepared separately, which presents effects determinations for each of these species. BPA submitted the Biological Assessment to the USFWS and NMFS for their review and concurrence with the effects determinations for each species. The effects determinations are presented in Table 4.4-1, Threatened and Endangered Wildlife Species Effect Determinations, and Table 4.4-2, Proposed Listed Wildlife Species Effect Determinations. BPA received USFWS concurrence on November 4, 2002. There were no effects to fish species listed by NMFS so they did not review the BA.

Possible impacts of the alternatives to federal threatened or endangered species are discussed in this section and in Chapter 4, *Environmental Consequences*, (Sections 4.3, *Vegetation*; 4.4, *Wildlife*; and 4.5, *Fish Resources*). Detailed discussions of federal proposed threatened and endangered species, candidate species, and species of concern are included in Appendix F, Rare Plant Survey for the Preferred Alternative and Appendix G, Fish and Wildlife Technical Report.

5.2.1 Fish

The NMFS lists chinook salmon (Upper Columbia River Spring Run) as endangered, Upper Columbia River steelhead trout as endangered, and Middle Columbia River steelhead as threatened. USFWS lists Bull trout as threatened.

Construction impacts would be generally short-term disturbances related to construction such as sediment input, mechanical disturbance, and material spills. However, since most of the project construction will occur away from streams and include mitigation (such as construction timing restrictions for in-water work and near sensitive spawning areas, and spill prevention and erosion measures), short-term construction-related disturbances should result in low or no impacts to all fish species.

Long-term impacts resulting from ongoing operation and maintenance would result mostly from habitat alteration due to clearing of riparian vegetation, changes in runoff and infiltration patterns (from upland vegetation clearing), sedimentation from cleared areas, and maintenance access streams. With similar mitigation employed during construction, maintenance activities should result in low or no impacts to all fish species.

5.2.2 Wildlife

Bald eagles are listed by the USFWS as threatened and are known to nest within the study area. Winter roosting areas are located along Wilson and Naneum Creeks. Construction near known bald eagle roost sites might disturb wintering bald eagles. However, in areas away from roost sites, the disturbance of bald eagles from construction will result in a minimal impact. With mitigation restricting construction activities in the Wilson/Naneum Creek areas during the winter use period, the proposed project would have no adverse impact on bald eagles. Other listed wildlife species that were identified as potentially occurring in or near the project area include the grizzly bear, gray wolf, Canada lynx, northern spotted owl and the marbled murrelet. However no suitable habitat or occurrences of these species were identified along the proposed project, therefore the project would have no impact on these species.

5.2.3 Plants

Ute ladies'-tresses is listed as a threatened species by the USFWS. There are several occurrences of this species in Washington state, but this species is not known to occur in any of the four counties within the study area. Potential habitat for this species may occur along Segments A, D, E, and F. Field surveys were conducted on the Preferred Alternative in August 2001 and 2002, to determine the presence of the species or its habitat. No populations were found. No impact to Ute ladies'-tresses would result from the project. Other listed plant species that were identified as potentially occurring in or near the project area include the Wenatchee Mountains checkermallow. However, this plant is not known to occur within 20 miles of the project area and there is no suitable habitat, therefore the project would have no effect on this species.

5.3 Fish and Wildlife Conservation

5.3.1 Fish and Wildlife Conservation Act

The Fish and Wildlife Conservation Act of 1980 (16 USC 2901 et seq.) encourages federal agencies to conserve and promote conservation of non-game fish and wildlife species and their habitats. In addition, the Fish and Wildlife Coordination Act of 1934 (16 USC 661 et seq.) requires federal agencies undertaking projects affecting water resources to consult with the USFWS and the state agency responsible for fish and wildlife resources.

Mitigation designed to conserve wildlife and their habitat is provided in Chapter 4 (See Sections 4.4.10, *Recommended Mitigation*, and 4.5.10, *Recommended Mitigation*). Standard erosion control

measures would be used during construction to control sediment movement into streams, protecting water quality and fish habitat.

5.3.2 Essential Fish Habitat

Public Law 104-297, the Sustainable Fisheries Act of 1996, amended the Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act) to establish new requirements for “Essential Fish Habitat” (EFH) descriptions in federal fishery management plans and to require federal agencies to consult with NMFS on activities that may adversely affect EFH. The Magnuson-Stevens Act requires all fishery management councils to amend their fishery management plans to describe and identify EFH for each managed fishery. The Pacific Fishery Management Council has issued such an amendment in the form of Amendment 14 (1999) to the Pacific Coast Salmon Plan. This amendment covers EFH for all fisheries under NMFS’ jurisdiction that would potentially be affected by the proposed project. Specifically, these are the chinook and coho salmon fisheries. EFH in the project area includes all streams, lakes, ponds, wetlands, and other current viable water bodies and most of the habitat historically accessible to salmon. Activities occurring above impassable barriers that are likely to adversely affect EFH below impassable barriers are subject to the consultation provisions of the Magnuson-Stevens Act.

Under the Magnuson-Stevens Act, NMFS must be consulted by any federal agency undertaking, permitting, or funding activities that may adversely affect EFH, regardless of its location. Under Section 305(b)(4) of the act, NMFS is required to provide EFH conservation and enhancement recommendations to federal and state agencies for actions that adversely affect EFH. Wherever possible, NMFS uses existing interagency coordination processes to fulfill EFH consultations with federal agencies. For the proposed project, this goal would be met by incorporating EFH consultation into the Endangered Species Act Section 7 consultation process.

5.3.3 Migratory Bird Act

The Migratory Bird Treaty Act (16 USC 703-712, July 3, 1918, as amended) implements various treaties and conventions between the United States and other countries, including Canada, Japan, Mexico, and the former Soviet Union, for the protection of migratory birds. Under the act, “taking,” killing, or possessing migratory birds or their eggs or nests is unlawful. Most species of birds are classified as migratory under the act, except for upland birds such as pheasant, chukar, and gray partridge.

The act allows few exemptions, such as waterfowl hunting. Many types of development result in the taking of migratory birds: collision

with windows, for example, is a leading cause of death among songbirds. Taking may be allowed under a scientific permit if research is deemed beneficial to migratory birds.

Construction, operation, and maintenance of the proposed project would result in some impacts to migratory birds. Some of the potentially impacted bird species are protected under the Migratory Bird Treaty Act. Mortality of birds listed under the Migratory Bird Treaty Act could be viewed as a violation of this federal act, although there are presently no permits available to federal agencies for “incidental take”, such as would result from the proposed transmission line project. Potential impacts to migratory birds include loss of habitat for species that nest in second growth coniferous, deciduous, or mixed forest types and that use edge habitat. Impacts would be limited to individuals potentially nesting in the area and would be incidental to the action. Given the large amount of habitat available for these species outside of the proposed clearing, the reduction in nesting habitat for these species is expected to be minor. BPA would ensure appropriate mitigation measures are employed to reduce the risk of mortality to a minimum.

5.3.4 Bald Eagle and Golden Eagle Protection Act

The Bald Eagle Protection Act (16 USC 668-668d, June 8, 1940, as amended 1959, 1962, 1972, and 1978) prohibits the taking or possession of and commerce in bald and golden eagles, with limited exceptions. Because a small number of bald eagles may reside within foraging distance of the proposed project, there is a remote possibility some mortality could result to bald eagles. However, because the Act only covers intentional acts, or acts in “wanton disregard” of the safety of golden or bald eagles, this project is not viewed as subject to its compliance. See Chapters 3 and 4 of this EIS for further discussion. Potential impacts to bald eagles are addressed in the Biological Assessment prepared for this project as required under the ESA.

5.4 Heritage Conservation

Congress has passed many federal laws to protect the nation’s historic properties. These include the National Historic Preservation Act, the Archaeological Resources Protection Act, the American Indian Religious Freedom Act, the National Landmarks Program, and the World Heritage List. Preserving historic properties allows many Americans to have an understanding and appreciation of their origins and history. An historic property is an object, structure, building, site, or district that provides irreplaceable evidence of natural or human history of national, state, or local significance. Historic properties include **traditional cultural property (TCP)**, National Landmarks,

Reminder

*A **traditional cultural property (TCP)** is defined generally as one that is eligible for inclusion in the NRHP because of its association with cultural practices or beliefs (e.g., traditions, beliefs, practices, lifeways, arts, crafts, and social institutions) of a living community that are rooted in that community’s history, and are important in maintaining the continuing cultural identity of the community.*

archaeological sites, and properties listed or eligible for listing on the National Register of Historic Places (NRHP).

Construction, operation, and maintenance of the alternatives could potentially affect historic properties. A literature review of the study area was done to determine the prehistory and history of the area and identify currently recorded sites. Pedestrian surveys of the ROW, access roads, and fiber route were also completed. This information and results of the survey are included in Chapters 3 and 4. A traditional cultural properties (TCPs) study is being prepared to augment the literature review and pedestrian surveys.

Pedestrian surveys will continue in January and/or February 2003 to evaluate and move any access roads and towers that may potentially affect known historic properties.

BPA shall continue Section 106 consultation with the Washington Office of Archaeology and Historic Preservation and affected Tribes to determine the effect of any potential impacts to listed and potentially eligible historic properties. BPA sent the ROW survey report (prepared and reviewed by a consultant under contract to the Yakama Nation) to affected Tribes (Yakama Nation, Confederated Tribes of the Colville Indian Reservation [CCT]) for information or review and to the Washington State Historic Preservation Office (SHPO) for concurrence in November 2002. The SHPO concurred with BPA's findings of no adverse effect. BPA will also send the access road and fiber survey report to the affected Tribes for information or review and to the SHPO for concurrence after surveys are complete and the report is finalized, prior to the initiation of any construction in culturally sensitive areas. BPA will request SHPO's concurrence on the findings, and if necessary, will undergo a Programmatic Memorandum of Agreement.

BPA is working with the CCT and the Yakama Nation to protect historic properties. Coordination will continue with the Tribes through construction.

If, during construction, previously unidentified historic properties are located, work will be halted in the immediate vicinity and BPA will follow all required procedures set forth in the following regulations, laws, and guidelines: Section 106 (36 CFR Part 800) of the National Historic Preservation Act of 1969, as amended (16 USC 470); the National Environmental Policy Act of 1969 (42 USC 4321-4327); the American Indian Religious Freedom Act of 1978 (PL 95-341); the Archaeological Resources Protection Act of 1979 (16 USC 470a-470m); and the Native American Graves Protection and Repatriation Act of 1990 (PL 101-601). A Memorandum of Agreement will be

prepared if there is an adverse effect on a historic property that is eligible for listing on the NRHP.

5.4.1 Tribal Consultation

Under its responsibilities to Section 106 of the National Historic Preservation Act, BPA determined that the proposed action is a federal undertaking that has the potential to cause effects on historic properties. Pursuant to 36 CRF 800.4(a)(4), BPA initiated formal consultation with the Yakama Indian Nation and the CCT.

5.4.1.1 Yakama Indian Nation

BPA initiated formal government-to-government consultation with the Yakama Indian Nation in a letter dated March 30, 2001 to Mr. Lonnie Selam, Chairman, Tribal Council. This letter was signed by Stephen J. Wright, BPA's Acting Administrator and CEO. No response was received although meetings were held to discuss project details.

On June 14, 2001, BPA sent a letter to Mr. Johnson Meninick, Cultural Resources Program Manager, Yakama Indian Nation, initiating a consultation process. BPA did not receive a response although meetings were held to discuss project details.

On April 8, 2002, BPA sent a letter to Mr. Johnson Meninick, Cultural Resources Program Manager, Yakama Nation, initiating formal consultation. BPA did not receive a response.

On February 14, 2002, BPA signed a contract with the Yakama Indian Nation to conduct the first phase of a cultural resource survey for the project. While not directly under contract to BPA for the second phase of the survey, the Yakama Nation participated on the survey team and reviewed the second phase survey report.

5.4.1.2 Confederated Tribes of the Colville Indian Reservation

On April 8, 2002, BPA sent a letter to Ms. Adeline Fredin, Historic Preservation Director, CCT, initiating formal consultation. Ms. Fredin responded on May 22, 2002, requesting a consultation meeting be scheduled to discuss project details and issues. A consultation meeting occurred on July 2, 2002. The Schultz Hanford Area Transmission Line Project and other transmission line projects of concern to the CCT were discussed.

The CCT, under contract to Parsons Brinckerhoff (BPA's contractor), provided the Cultural Resource Assessment study for the Draft EIS.

The CCT is presently under contract to BPA to conduct a Traditional Cultural Properties Study, including oral history.

5.5 Federal, State, Area-Wide, and Local Plan and Program Consistency

5.5.1 Federal

5.5.1.1 U.S. Bureau of Land Management (BLM)

Portions of all alternatives cross BLM-administered lands that are managed by the Spokane District. The BLM Spokane District is divided into 10 management areas, of which two are crossed by the alternatives. Table 5.5-1, *BLM-Administered Lands Crossed by Project Segments*, indicates which management areas are crossed by each alternative, and more specifically, each segment.

**Table 5.5-1
BLM-Administered Lands Crossed by Project Segments**

Segment	BLM Spokane District Management Area	Linear Distance Crossed on BLM-administered Land (miles)
A	Scattered Tracts	0.88
B _{NORTH}	Saddle Mountains	0.64
B _{SOUTH}	Saddle Mountains	0.64
C	Scattered Tracts	0.22
D	Saddle Mountains and Scattered Tracts	2.86
E	Saddle Mountains	4.88
F	Saddle Mountains	12.84

Note: BLM-administered lands crossed by B_{NORTH} and B_{SOUTH} are currently within the YTC boundaries and are managed under the YTC Cultural and Natural Resources Management Plan.

Table has been updated for the FEIS.

Several BLM planning documents identify goals, objectives, and standard design features and operations procedures for activities proposed to occur on BLM-administered lands crossed by the alternatives. These plans include the Spokane Resource Management Plan Record of Decision (1987), the Proposed Spokane Resource Management Plan Amendment Final Environmental Impact Statement (1992), and the Recreation Management/Implementation Plan for the Saddle Mountain Management Area (1997). Table 5.5-2, *Spokane District General Management Objectives*, lists the general management objectives stated in the Resource Management Plan as amended (**RMP**). This table also includes the actions BPA would take to be consistent with the management objectives of the RMP.

➔ For Your Information

BLM land is crossed by all segments, see Map 7, Land Ownership.

Table 5.5-2
Spokane District General Management Objectives

General Management Objectives	Consistency
1. Protect or enhance water quality with particular attention to those watersheds with major downstream water uses including anadromous and other sport fisheries and agriculture.	<ul style="list-style-type: none"> ▪ BPA would protect water quality by locating crossing structures as far back from river stream banks as possible and avoiding riparian areas, drainage ways, canals, and other water bodies to the extent possible. ▪ Other measures to minimize impacts to water quality and sedimentation of water bodies are identified in Section 4.1, <i>Water Resources, Soils, and Geology</i>.
2. Maintain and/or improve range productivity by providing available forage to maintain existing or target wildlife populations as estimated by the Washington Department of Fish and Wildlife. The remaining forage would be provided for livestock.	<ul style="list-style-type: none"> ▪ BPA would minimize the amount of vegetation disturbed by construction activities to maintain range productivity. ▪ BPA would prepare a checklist for the management of the ROW vegetation. ▪ Other measures to minimize impacts to vegetation are described in Section 4.3.8, <i>Recommended Mitigation</i>.
3. Adjust the level of sustained yield timber production by restricting production on specific forestlands, where appropriate, to accommodate other resource values. Forestlands would be withdrawn from production only when stipulations and/or mitigation would not adequately protect the other resources.	<ul style="list-style-type: none"> ▪ No forestlands would be affected by the construction or operation and maintenance of the transmission line.
4. Keep public lands open for exploration/development of mineral resources, rights-of-way, access, and other public purposes with consideration to mitigate designated resource concerns.	<ul style="list-style-type: none"> ▪ Establishing a right-of-way for a new transmission line is a use for which the public lands are kept open. ▪ Mitigation for various resource concerns is discussed in Chapter 4, <i>Environmental Consequences</i>.
5. Enhance BLM land pattern and resource management efficiency through land tenure adjustments. Identify opportunities for jurisdictional transfers and develop leases or cooperative management agreements with other agencies or private individuals to improve management efficiency.	<ul style="list-style-type: none"> ▪ No land tenure adjustments would result from the construction or operation and maintenance of the transmission line.
6. Manage upland habitat for nongame and game species to meet WDFW population targets.	<ul style="list-style-type: none"> ▪ BPA would minimize the amount of vegetation disturbed by construction activities to maintain upland habitat for nongame and game species. ▪ BPA would prepare a checklist for the management of the ROW vegetation. ▪ Other measures to minimize impacts to vegetation are described in Section 4.3.8, <i>Recommended Mitigation</i>.
7. Manage public lands and keep access routes open for a variety of recreational opportunities/experiences, including both motorized and nonmotorized recreation activities.	<ul style="list-style-type: none"> ▪ No access routes on public land would be closed to the public as a result of the construction and operation and maintenance of a new transmission line, unless the landowner requests that access be limited or closed.

General Management Objectives	Consistency
8. Consider the protection and/or enhancement of state listed threatened or endangered species habitat.	<ul style="list-style-type: none"> ▪ BPA would consider impacts to state listed threatened and endangered wildlife, fish and plant species (See Sections 4.3, <i>Vegetation</i>, 4.4, <i>Wildlife</i>, and 4.5, <i>Fish Resources</i>). ▪ Mitigation for big game disturbance, avian collision, raptor disturbance, shrub-steppe habitat loss, and wildlife disturbance is detailed in Section 4.4.10, <i>Recommended Mitigation</i>. ▪ Mitigation for impacts to fish resources is detailed in Section 4.5.10, <i>Recommended Mitigation</i>. ▪ Mitigation for impacts to plants is detailed in Section 4.3.8, <i>Recommended Mitigation</i>.

Source: Spokane Resource Management Plan Record of Decision, 1987; Proposed Spokane Resource Management Plan Amendment Final Environmental Impact Statement, 1992.
Table has been updated for the FEIS.

The RMP also provides objectives for the management of specific resources. Resources that may be affected by the construction and operation and maintenance of a new transmission line are listed in Table 5.5-3, *Spokane District Objectives for the Management of Specific Resources*, with associated management objectives. The actions that BPA would take to be consistent with these specific management objectives are also included.

Table 5.5-3
Spokane District Objectives for the
Management of Specific Resources

Management Objectives for Specific Resources	Consistency
<p>Recreation Management</p> <ul style="list-style-type: none"> Recreational activities and visual resources will be evaluated as part of the specific activity plans and will be evaluated to determine their appropriateness in relation to the land use allocations made in the RMP. BLM management of cultural and historic resources emphasizes protection and preservation. The evaluation of visual resources will consider the significance of proposed projects and the visual/scenic sensitivity of the affected area. Special management areas, or Areas of Critical Environmental Concern (ACECs), have management plans that protect and prevent irreparable damage to important historic, cultural, or scenic values, fish and wildlife resources, or other natural systems or processes, or to protect life and safety from natural hazards. Off-Road Vehicle (ORVs) designations preclude access to public lands seasonally or year-long to all or specified types of vehicle use. 	<ul style="list-style-type: none"> BPA would evaluate impacts to recreational activities. (Section 4.9, <i>Recreational Resources</i>.) Impacts to recreation activities would occur during construction and be of short duration. Construction, operation and maintenance of a new transmission line would not affect the general layout and themes of recreation sites since most recreation is dispersed and would undergo temporary, minor relocation during construction. Cultural and historic resources would be protected and preserved to the extent possible. Mitigation for these resources is detailed in Section 4.10.5, <i>Recommended Mitigation</i>. No designated visual resource management areas would be affected by the construction or operation and maintenance of a new transmission line. BPA would take into account the impact of the project on visual resources, and would mitigate to minimize impacts (See Section 4.8.9, <i>Recommended Mitigation</i>). No ACEC's will be crossed by the proposed project. Sentinel Slope ACEC is the nearest one, located over three miles west of the proposed transmission line. Alternative 1A crosses BLM-administered lands that have ORV designations. In this area, vehicles are permanently restricted to designated roads and trails. BPA would utilize designated roads to the extent possible. If other access was temporarily required for construction, approval from BLM would be obtained.
<p>Wildlife and Fish Habitat Management</p> <ul style="list-style-type: none"> Project case-by-case evaluations will be made to consider the significance of the proposed projects and the sensitivity of fish and wildlife habitats in the affected areas. Management actions within riparian habitat areas, wetlands, and floodplains will include measures to preserve, protect, and restore natural functions. Seasonal restrictions will be applied to mitigate the impacts of human activities on important seasonal wildlife habitat. Sufficient forage and cover will be provided for terrestrial wildlife on seasonal habitat to maintain existing 	<ul style="list-style-type: none"> BPA would consider the impacts to fish and wildlife species and habitat. (See Sections 4.4, <i>Wildlife</i>, and 4.5, <i>Fish Resources</i>). Mitigation for big game disturbance, avian collision, raptor disturbance, shrub-steppe habitat loss, and wildlife disturbance is detailed in Section 4.4.10, <i>Recommended Mitigation</i>. Mitigation for impacts to fish resources is detailed in Section 4.5.10, <i>Recommended Mitigation</i>. BPA would avoid impacts to riparian habitat areas, wetlands, and floodplains to the extent possible by locating structures and access roads outside resource boundaries. If impacts cannot be avoided, mitigation measures to minimize impacts are detailed in Section 4.2.8,

Management Objectives for Specific Resources	Consistency
population levels or target population levels as established by WDFW.	<p><i>Recommended Mitigation.</i></p> <ul style="list-style-type: none"> BPA would maintain sufficient forage and cover by minimizing disturbance to vegetation. Specific mitigation is described in Section 4.3.8, <i>Recommended Mitigation</i>.
<p><i>Endangered, Threatened, or BLM Sensitive Species Habitat</i></p> <ul style="list-style-type: none"> Prior to any vegetation or ground disturbing manipulation projects, the BLM requires a survey of the project site for plants and animals listed or proposed for listing as threatened or endangered, or their critical habitats. For BLM sensitive species, or proposed or candidate T&E species, it is BLM policy to ensure that the crucial/essential habitats be considered in all management decision to minimize the need for future listing by either federal or state governments. 	<ul style="list-style-type: none"> BPA would conduct surveys of the <u>Preferred Alternative</u> that falls within BLM managed lands for plants and animals listed or proposed for listing as threatened or endangered, or their critical habitats. BPA would consider the impacts of the <u>Preferred Alternative</u> on sensitive proposed, or candidate T&E species. Mitigation detailed in Sections 4.4.10, 4.5.10, and 4.3.8, <i>Recommended Mitigation</i>, would minimize the need for future listings by either the federal or state governments. BPA would comply with the Endangered Species Act and would conduct the appropriate level of consultation with the US Fish and Wildlife Service and National Marine Fisheries Service.
<p><i>Range Program/Grazing Management</i></p> <ul style="list-style-type: none"> Continue present management of public land to benefit livestock and wildlife. 	<ul style="list-style-type: none"> BPA would minimize disturbance to vegetation in order to support the present management practices on public land that benefit livestock and wildlife. Specific mitigation is detailed in Section 4.3.8, <i>Recommended Mitigation</i>.
<p><i>Ongoing Management Programs</i></p> <ul style="list-style-type: none"> Noxious weed control will be proposed and subjected to site-specific environmental analyses. All public land will be available and open for utility and transportation corridor development except the Hot Lakes Resource Natural Area (RNA)/ACEC, the Brewster Bald Eagle Roost and Juniper Forest ACECs, the Chopaka Mountain Wilderness Study Area (WSA), and the Juniper Dunes Wilderness Area. New facilities will be encouraged to be located within existing corridors to the extent possible. 	<ul style="list-style-type: none"> BPA would incorporate measures to minimize the spread of noxious weeds. Mitigation to be employed is described in Section 4.3.8.4, <i>Minimize the Introduction and Spread of Weeds</i>. The new transmission line would not cross the Hot Lakes RNA/ACEC, the Brewster Bald Eagle Roost and Juniper Forest ACECs, the Chopaka Mountain WSA, or the Juniper Dunes Wilderness Area. The new transmission line would be located within or adjacent to existing corridors to the extent possible.

Reminder

ACEC: Area of Critical Environmental Concern

Saddle Mountain Management Area is crossed by Segments B_{NORTH}, B_{SOUTH}, D, E, and F, see Map 7, Land Ownership.

Source: Spokane Resource Management Plan Record of Decision, 1987; Proposed Spokane Resource Management Plan Amendment Final Environmental Impact Statement, 1992.

Table has been updated for the FEIS.

The Preferred Alternative and Alternatives 1 and 1A cross the Saddle Mountain Management Area of the Spokane District, for which the Saddle Mountain Recreation Management/Implementation Plan applies. This plan provides management objectives for important resources including minerals, livestock grazing, recreation, wildlife

habitat, soils, and watersheds. The objectives of this plan and the actions that BPA would take to be consistent with this plan are described in Table 5.5-4, *Saddle Mountain Management Area Resource Management Objectives*.

Table 5.5-4
Saddle Mountain Management Area
Resource Management Objectives

Resource Management Objectives	Consistency
1. Manage public lands and keep access routes open for a variety of recreational opportunities/ experiences, including both motorized and non-motorized activities.	<ul style="list-style-type: none"> No existing access routes on public land would be closed to the public as a result of the construction and operation and maintenance of a new transmission line, unless the landowner requests that access be limited or closed.
2. Keep public lands open for public purposes such as the exploration and/or development of mineral resources, rights-of-way, or access.	<ul style="list-style-type: none"> Establishing a right-of-way for a new transmission line is a use for which the public lands are kept open. Mitigation for various resource concerns is discussed in Chapter 4, <i>Environmental Consequences</i>.
3. Enhance resource management efficiency through land tenure adjustments. Identify opportunities for jurisdictional transfers, cooperative management agreements with other agencies, or private individuals.	<ul style="list-style-type: none"> No land tenure adjustments would result from the construction or operation and maintenance of the transmission line.
4. Protect and/or enhance federally sensitive, threatened, or endangered species habitat.	<ul style="list-style-type: none"> BPA would conduct surveys of the project site within the Saddle Mountain Management Area for plants and animals listed or proposed for listing as threatened or endangered, and for BLM Sensitive Species or their habitats. BPA would consider the impacts of the project on sensitive proposed or candidate T&E species. Mitigation detailed in Sections 4.4.10, 4.5.10, and 4.3.8, <i>Recommended Mitigation</i>, would minimize the need for future listings by either the federal or state governments. BPA would comply with the Endangered Species Act and would conduct the appropriate level of consultation with the US Fish and Wildlife Service and National Marine Fisheries Service.
5. Provide for safe use of the Saddle Mountains.	<ul style="list-style-type: none"> BPA would take precautions to minimize impacts to public health and safety during the construction and operation and maintenance of a new transmission line. Precautions would be taken for electric and magnetic fields, noise, toxic and hazardous materials, and fire. (See Section 4.11, <i>Public Health and Safety</i>).

Resource Management Objectives	Consistency
6. Protect and/or minimize impacts to important values such as cultural and archaeological resources, traditional and cultural properties, Native American sacred sites, or special status species.	<ul style="list-style-type: none"> ▪ Cultural and historic resources would be protected and preserved to the extent possible. Mitigation for these resources is detailed in Section 4.10.5, <i>Recommended Mitigation</i>. ▪ BPA would comply with Sections 106 and 110 of the National Historic Preservation Act (NHPA), the Archeological Resources Protection Act (ARPA), the Native American Graves Protection and Repatriation Act (NAGPRA), the National Environmental Protection Act (NEPA), and Executive Order 13007. ▪ BPA would consult with the Washington State Historic Preservation Officer (SHPO) through the Office of Archaeology and Historic Preservation (OAHP), affected Native American tribes, local governments, and the public to protect cultural resources.

Source: Recreation Management/Implementation Plan, Saddle Mountain Area—April 1997.
Table has been updated for the FEIS.

5.5.1.2 U.S. Department of Defense (DOD) – Yakima Training Center (YTC)

All of the alternatives (Segments A, B, and C) cross the YTC, which is managed by the US Army. The number one priority of the YTC is military training, which involves developing the skills and techniques necessary to fight, survive, and prevail in a wide variety of contingencies (U.S. Army, 2001). In concert with these military training goals, protection of environmental resources is also part of the YTC management program. A Cultural and Natural Resources Management Plan (CNRMP) identifies and supports military use of the YTC while managing the existing cultural and natural resources. The overall goals of the CNRMP and the actions that BPA would take to be consistent with the plan are described in Table 5.5-5, *Yakima Training Center CNRMP Goals*.

➡ Reminder

See Map 7, *Land Ownership*.

Table 5.5-5
Yakima Training Center CNRMP Goals

Goals	Consistency
1. Ensure YTC's ability to support and preserve military training.	<ul style="list-style-type: none"> ▪ All alternatives (Segments A, B) locate a new transmission line adjacent to an existing line. The existing transmission lines were in place prior to this land area becoming part of the YTC. As a result, the U.S. military has tailored its use of this area to accommodate existing transmission line facilities. ▪ Alternative 3 (Segment C) requires a new right-of-way and transmission line in an area where training maneuvers are not currently designed to work around such facilities. Live mortar training would need to be eliminated and ground maneuvers would also be affected. ▪ BPA would work closely with the Army to minimize conflicts and inconvenience from construction and maintenance activities.
2. Use a long-term, ecosystem management approach.	<ul style="list-style-type: none"> ▪ BPA would consider direct, indirect and cumulative impacts of the project on the environment. Mitigation for these impacts would be employed. (<i>See Chapter 4, Environmental Consequences</i>).
3. Integrate resource management goals within and among watersheds.	<ul style="list-style-type: none"> ▪ BPA would apply the resource goals (listed below) within and among all watersheds crossed by the proposed project on the YTC.
4. Promote land management flexibility by using adaptive management strategies.	<ul style="list-style-type: none"> ▪ Through the NEPA process, BPA would incorporate the concepts of adaptive management (land ecology, human desires and needs, and technology and economics) into the project decision-making process.
5. Develop management strategies that mitigate military training impacts.	<ul style="list-style-type: none"> ▪ BPA proposes mitigation measures for impacts to resources, including military training, that would be caused by the construction and operation and maintenance of a new transmission line. Resource impacts and mitigation strategies are described in <i>Chapter 4, Environmental Consequences</i>.

Goals	Consistency
6. Strive to meet the cultural and natural resource goals identified in each resource area (identified below).	
<p>Soils and Geology</p> <p>To maintain or improve soil resources that provide the basis for healthy, productive ecosystems.</p>	<ul style="list-style-type: none"> ▪ BPA would preserve existing vegetation where possible, and stabilize disturbed areas. As soon as practicable, stabilization measures would be started where construction activities have temporarily or permanently ceased. ▪ BPA would avoid riparian areas, drainage ways, canals, and other water bodies where possible. When these areas cannot be avoided, BPA would apply erosion control measures to prevent degradation of riparian or stream quality at the local and watershed level. ▪ BPA would prepare a stormwater pollution prevention plan (as required under the National Pollution Discharge Elimination System General Permit). ▪ Other mitigation to protect soils and geology is detailed in Section 4.1.4, <i>Recommended Mitigation</i>.
<p>Water Resources</p> <p>To meet State of Washington surface water quality standards (WAC 173-201A-030), promote sustained survival of aquatic macro-invertebrate communities, and support water quality management efforts in the Yakima and Columbia River basins.</p>	<ul style="list-style-type: none"> ▪ BPA would set crossing structures as far back from stream banks and other water bodies as far as possible. BPA would avoid refueling and/or mixing hazardous materials where accidental spills could enter surface or groundwater. ▪ BPA would locate structures outside the Columbia River Shoreline area to the extent possible (consistency with the Shoreline Management Act described in Section 5.11.1, <i>Shoreline Management Act</i>). ▪ BPA would design the project to comply with local ordinances and state and federal water quality standards, to prevent degradation of aquifers and not jeopardize their usability as a drinking water source. ▪ BPA would prepare a stormwater pollution prevention plan (as required under the National Pollution Discharge Elimination System General Permit). ▪ Additional mitigation measures to protect water resources is described in Section 4.1.4, <i>Water Resources, Soils, and Geology</i>.

Goals	Consistency
<p><i>Upland Vegetation</i></p> <p>To maintain or restore upland vegetation in a diverse mosaic of plant communities in support of a range of functions.</p>	<ul style="list-style-type: none"> ▪ Prior to construction, BPA would survey the <u>Preferred Alternative</u> for known occurrences and potential areas of rare plant species. ▪ BPA would avoid high-quality native plant communities if possible. If not avoidable, BPA would minimize impacts to these communities. If possible, structures and roads would be placed to avoid impacting high-quality native plant communities. ▪ BPA would prepare a ROW Maintenance Plan to designate which species are appropriate for restoration in certain areas. It would include specifications for planting, including the appropriate time to plant. ▪ A checklist would be prepared for the management of the ROW vegetation. BPA would reseed disturbed areas with native seed mix approved by YTC. ▪ Specific mitigation for impacts to vegetation is detailed in Section 4.3.8, <i>Recommended Mitigation</i>. ▪ BPA would survey for noxious weeds before and after construction. Weed control efforts would be conducted during and after construction to minimize the spread of noxious weeds. Specific measures to mitigate for noxious weeds is detailed in Section 4.3.8.4, <i>Minimize the Introduction and Spread of Weeds</i>.
<p><i>Riparian and Wetland Resources</i></p> <p>To provide ecologically healthy and functioning riparian and wetland areas on YTC.</p>	<ul style="list-style-type: none"> ▪ BPA would avoid impacts to riparian habitat areas, wetlands, and floodplains to the extent possible by locating structures outside these resource boundaries. If impacts cannot be avoided, mitigation measures to minimize impacts is detailed in Section 4.2.8, <i>Recommended Mitigation</i>.
<p><i>Wildlife</i></p> <p>To provide self-sustaining wildlife populations.</p>	<ul style="list-style-type: none"> ▪ BPA would conduct surveys of the <u>Preferred Alternative</u> for wildlife listed or proposed for listing as threatened or endangered, or their critical habitats. ▪ BPA would consider the impacts of the <u>Preferred Alternative</u> on sensitive, proposed, or candidate T&E species. Mitigation detailed in Section 4.4.10, <i>Recommended Mitigation</i>, would minimize the need for future listings by either the federal or state governments. ▪ BPA would comply with the Endangered Species Act and would conduct the appropriate level of consultation with the US Fish and Wildlife Service.

Goals	Consistency
<p><i>Fish Resources</i></p> <p>To provide an ecologically healthy and functioning native fishery.</p>	<ul style="list-style-type: none"> ▪ BPA would consider the impacts of the <u>Preferred Alternative</u> on sensitive, proposed, or candidate T&E species. Mitigation detailed in Section 4.5.10, <i>Recommended Mitigation</i>, would minimize the need for future listings by either the federal or state governments. ▪ BPA would comply with the Endangered Species Act and would conduct the appropriate level of consultation with the US Fish and Wildlife Service and National Marine Fisheries Service.
<p><i>Cultural Resources</i></p> <p>To identify and manage historic properties and traditional resources.</p>	<ul style="list-style-type: none"> ▪ Cultural and historic resources would be protected and preserved to the extent possible. Mitigation for these resources is detailed in Section 4.10.5, <i>Recommended Mitigation</i>. ▪ BPA would comply Sections 106 and 110 of the National Historic Preservation Act (NHPA), the Archeological Resources Protection Act (ARPA), the Native American Graves Protection and Repatriation Act (NAGPRA), the National Environmental Protection Act (NEPA), and Executive Order 13007. ▪ BPA would consult with the Washington State Historic Preservation Officer (SHPO) through the Office of Archaeology and Historic Preservation (OAHP), affected Native American tribes, local governments, and the public to protect cultural resources.
<p><i>Recreation</i></p> <p>To provide outdoor recreational opportunities without compromising public safety, negatively impacting natural resources, or interfering with military training.</p>	<ul style="list-style-type: none"> ▪ BPA would evaluate impacts to recreational activities (Section 4.9, <i>Recreational Resources</i>). ▪ Impacts to recreation activities would occur during construction and be of short duration. ▪ Construction and operation and maintenance of a new transmission line would not permanently affect recreation activities or access to recreation sites since most recreation is dispersed and would undergo temporary, minor relocation during construction.

Source: Cultural and Natural Resources Management Plan, 2001. Table has been updated for the FEIS.

5.5.1.3 U.S. Department of Energy (USDOE) – Hanford Reach National Monument and Hanford Site

The Preferred Alternative and Alternatives 1 and 1A (Segments D, E, and F) cross areas of the Hanford Site and the Hanford Reach National Monument owned by the USDOE and managed by USDOE and the USFWS. The 586-square-mile Hanford Site was created in 1943 through the acquisition and consolidation of private lands with existing government land for the purpose of producing nuclear materials for national defense. In the late 1980's the USDOE's primary mission for the Hanford Site changed from defense materials production to environmental restoration, in particular, the cleanup of radioactive and hazardous materials stored on the site. As part of the new mission, and to fulfill existing USDOE requirements, USDOE developed a Comprehensive Land Use Plan (CLUP) for the Hanford Site. In 1999, the USDOE issued a Record of Decision (ROD) adopting a CLUP defined as the Preferred Alternative in the Final Hanford Comprehensive Land-Use Plan EIS (HCP-EIS) (USDOE, 1999).

The south end of Alternatives 1 and 1A (Segments E and F) and the Hanford Substation are located on land designated in the CLUP as Conservation (areas managed for the management and protection of archaeological, cultural, ecological and natural resource- limited mining could occur as a special use). Excepting Hanford Substation, land use along the southern ends of Alternatives 1 and 1A within the Hanford Site and Hanford Reach National Monument are designated as Preservation (areas managed for the preservation of archaeological, cultural, ecological, and natural resources).

Any physical development or land use activity occurring in the Preservation designation or in the Conservation designation, which does not meet the definition of a categorical exclusion under the DOE NEPA regulations, is defined as a Special Use, and subject to review and approval from USDOE before being allowed. All alternatives would cross land that would fall within the Special Use category.

The Hanford CLUP furthermore identifies five policies associated with Utility and Transportation corridors. Table 5.5-6, *Hanford CLUP Utility and Transportation Policies*, lists each policy and describes how BPA would meet the intent of each policy.

Reminder

See Map 7, Land Ownership.

**Table 5.5-6
Hanford CLUP Utility and Transportation Policies**

CLUP Policy	Consistency
1. With to-be-identified exception(s), existing utility and transportation corridor rights-of-way are the preferred routes for expanded capacity and new infrastructure.	<u>Line</u> Segments are located adjacent to or near existing utility corridor rights-of-way.
2. Existing utility corridors that are in actual service, clearly delineated, and of defined width, are not considered "nonconforming" uses in any land-use designation.	The utility corridor established for this project would be in service, and would therefore not be a "nonconforming" use.
3. Utility corridors and systems without the characteristics of Number 2 (above) are considered to be nonconforming uses and shall be identified in the applicable RMP or AMP.	Not applicable.
4. Avoid the establishment of new utility corridors within the Conservation and Preservation designations unless the use of an existing corridor(s) is infeasible or impractical.	In order to maintain the required separation between transmission lines, existing corridors would need to be slightly expanded for the Preferred Alternative (2) (Segment D), or new corridors would be constructed parallel to existing corridors Alternatives 1 and 1A (Segments E and F).
5. Avoid the location of new above-ground utility corridors and systems in the immediate viewshed of an American Indian sacred site. Prioritize for removal, as funding is available, existing nonconforming utility corridors and systems in such areas.	American Indian sacred sites have not been identified. A cultural resource survey will be conducted and tower <u>and access road</u> placement adjusted to the extent possible.

→ Reminder

See Map 7, Land Ownership.

5.5.1.4 U.S. Fish and Wildlife Service (USFWS)

The USFWS has several roles to fulfill in association with the proposed project. As the agency responsible for overseeing federally listed threatened and endangered species (See Section 5.2, *Endangered and Threatened Species*), they must ensure that the project does not jeopardize the continued existence of any listed species or contribute an unwarranted adverse effect to such species. Also, as managers of the Columbia National Wildlife Refuge and the Hanford Reach National Monument, they must manage the area for natural resource and conservation values.

Columbia National Wildlife Refuge – The Preferred Alternative and Alternative 1 (Segments D and E) cross an isolated parcel of the Columbia National Wildlife Refuge at the mouth of Crab Creek. This parcel is owned and managed by the USFWS. The USFWS does not presently have a Comprehensive Conservation Plan for the management of this refuge. An easement to cross USFWS lands

would be required from the USFWS, and a compatibility determination, under the National Wildlife Refuge System Act, must be made. A Determination of Compatibility has been done by the USFWS and is included in Appendix L, *Columbia National Refuge Determination of Compatibility*. All measures as described in the Determination of Compatibility have been agreed to by BPA and compliance with these terms will be required for BPA to obtain an easement to cross the refuge.

Hanford Reach National Monument/Fitzner-Eberhardt Arid

Lands Ecology Reserve – The USFWS has managed USDOE-owned lands under a USDOE permit in the Hanford Site area since 1971 when it took over management of the Saddle Mountain Wildlife Refuge area on the north side of the Columbia River. More recently, USFWS took over management of the Fitzner-Eberhardt Arid Lands Ecology Reserve (ALE) from the USDOE in 1997. Management of the Wahluke Slope was assigned to the USFWS and WDFW in 1971. In 1999, the USFWS and WDFW agreed that the USFWS would assume management of the Wahluke Slope.

In 2000, the entire area north of the Columbia River, the Hanford Reach of the Columbia River, the Saddle Mountain National Wildlife Refuge, and the ALE was declared the Hanford Reach National Monument, owned by USDOE but with the USFWS responsible for managing much of the Monument area under permit from the USDOE. However, the USDOE manages the McGee/Riverlands area around Midway and the quarter-mile strip along the Columbia River on the south and west bank. The Preferred Alternative and Alternatives 1 and 1A (Segments D, E, and F) all pass through parts of the Hanford Reach National Monument managed by USFWS.

Specific management plans for the Hanford Reach National Monument have not yet been developed by the USFWS, so their applicability to the proposed project cannot be assessed. However, the Monument Proclamation includes a specific reference to upgrades to the Federal Columbia River Transmission System and states that:

“Replacement, modification, and expansion of existing Federal Columbia River Transmission System facilities, and construction of any new facilities, within the proposed monument, as authorized by other applicable law, may be carried out in a manner consistent with the proper care and management of the objects identified in the draft proclamation, as determined in accordance with the management arrangements set out in the draft proclamation.”

➡ Reminder

See Map 7, Land Ownership.

5.5.2 State

No conflicts with state land use plans or programs are anticipated. BPA would work with state agency representatives to minimize conflicts between proposed activities and land use plans. BPA would strive to meet or exceed the substantive standards and policies of the following regulations: State Environmental Policy Act, Growth Management Act, Shoreline Management Act, Hydraulic Project Approval, Forest Practices Act, and noxious weed control.

BPA would submit a Joint Aquatic Resources Permit Application (JARPA) and agree to construct culverts consistent with the design criteria outlined in a Hydraulic Project Approval (Chapter 75.20 RCW, Chapter 220-110 WAC), which has a goal to protect fish in waters of the state. More details on consistency with these plans are provided in Appendix H, Consistency with State and Local Government Regulations.

5.5.3 Counties

Alternatives would be located in Kittitas, Grant, Benton, and Yakima Counties in central Washington State. There are no incorporated cities or towns crossed by the alternatives. Table 5.5-7, *Zoning Designations Crossed by the Alternatives in Each County*, identifies zoning designations by county.

Table 5.5-7
Zoning Designations Crossed by the
Alternatives in Each County

Zoning Designations	Counties			
	Kittitas	Grant	Benton	Yakima
	Forest and Range	Rural Light Industrial	Unclassified	Agricultural
	Agricultural-20	Rural Remote	GMA Agricultural	
		Rural Residential 3		
		Open Space Conservation		
		Agricultural		
		Public Open Space		

BPA would work with county planners to minimize conflicts between proposed activities and county land use plans by striving, as much as possible, to meet or exceed the substantive standards and policies of the county zoning ordinances and comprehensive plans. More details on consistency with these plans are given in Appendix H, Consistency with State and Local Government Regulations.

BPA would also work with County Noxious Weed Control Boards to minimize the risk of spreading or introducing noxious weeds as a result of construction activities. More details on noxious weed control are provided in Appendix H, *Consistency with State and Local Government Regulations*.

5.6 Farmland Protection

The Farmland Protection Policy Act (PL 97-98; 7 USC 4201 et seq.) directs federal agencies to identify and quantify adverse impacts of federal programs on farmlands. The Act's purpose is to minimize the number of federal programs that contribute to the unnecessary and irreversible conversion of agricultural land to non-agricultural uses.

The location and extent of prime farmlands designated by the Natural Resource Conservation Service (NRCS) were obtained from NRCS soil survey information. Lists of unique, statewide, and locally important farmlands in Washington are in the process of being updated and certified; thus, are unavailable for consideration (Hipple, 2001).

Portions of all the alternatives cross soils designated by the NRCS as "prime farmland if irrigated." Prime farmland would be permanently affected if structures were located on designated soils. Farmland would not be permanently affected if the transmission line could span the designated soils. Table 5.6-1, *Distance and Percentage of Prime Farmland Crossed by Alternative*, lists the extent to which each alternative crosses soil designated as "prime if irrigated." Table 5.6-2, *Estimated Improvements on Lands Designated "Prime Farmland if Irrigated,"* lists the estimated number of structures and miles of access roads that would be built on these lands, while Table 5.6-3, *Estimated Area of Affected "Prime Farmland if Irrigated,"* identifies the estimated temporary and permanent area of effect from these improvements.

➔ For Your Information

Prime Farmland is land that has the best combination of physical and chemical characteristics for producing food, feed, fiber, forage, oilseed, livestock, timber, and other agricultural crops with minimum inputs of fuel, fertilizer, pesticides, and/or labor. It does not include land already in or committed to urban development or water storage (USDA, NRCS web page).

Table 5.6-1
Distance and Percentage of
Prime Farmland Crossed by Alternative

Soil Classification	Alternative				TOTAL
	1	1A	2 (Preferred)	3	
Not Prime	57.97 mi. (93.1%)	65.07 mi. (93.3%)	57.35 mi. (90.0%)	55.30 mi. (96.0%)	235.69 mi. (93%)
Prime if Irrigated	4.3 mi. (6.9%)	4.7 mi. (6.7%)	6.4 mi. (10.0%)	2.3 mi. (4.0%)	17.7 mi. (7%)
Always Prime	0	0	0	0	0
TOTAL	62.27 mi.	69.77 mi.	63.75 mi.	57.6 mi.	253.39 mi.

New table for the FEIS.

Table 5.6-2
Estimated Improvements on Lands Designated
“Prime Farmland if Irrigated”

Improvement	Alternative			
	1	1A	2 (Preferred)	3
Structures	18	21	27	10
Access Roads	7.6 mi.	7.6 mi.	7.4 mi.	7.7 mi.

New table for the FEIS.

Table 5.6-3
Estimated Area of Affected
“Prime Farmland if Irrigated”

Area of Impact from		Alternative			
		1	1A	2 (Preferred)	3
Structures	Temporary	7.4 ac	8.4 ac	10.8 ac	4.1 ac
	Permanent	0.4 ac	0.4 ac	0.5 ac	0.2 ac
Access Roads	Temporary	5.5 ac	5.5 ac	5.4 ac	5.4 ac
	Permanent	2.6 ac	4.9 ac	3.1 ac	6.5 ac
Total Temporary		12.9 ac	13.9 ac	16.2 ac	9.5 ac
Total Permanent		3.0 ac	5.3 ac	3.6 ac	6.7 ac
TOTAL	TOTAL	15.9 ac	19.2 ac	19.8 ac	16.2 ac

New table for the FEIS.

Project alternatives would have minimum impact on area farmlands since:

- No additional nonfarmland would be created due to interference with existing land patterns except for the immediate area surrounding structures.

- Agricultural operations within the corridor are currently affected by the existing line.
- Impacts to existing substantial and well maintained on-farm investments would be minimized.
- The alternatives would not cause the agricultural use of adjacent farmlands to change, nor jeopardize the continued existence of area farm support services.

Any farmland that would be proposed to be converted to nonagricultural uses would require approval by the NRCS. Federal agencies intending to convert farmland to nonagricultural uses must complete form AD-1006, the Farmland Conversion Impact Rating form, and submit it to the local NRCS field office for review.

5.7 Floodplain/Wetland Assessment

In accordance with USDOE regulations on compliance with Floodplain/Wetland environmental review requirements (10 CFR 1022.12) and Executive Orders 11988 and 11990, BPA has prepared the following assessments of the impacts of the alternatives on floodplains and wetlands. BPA published a notice of floodplain/wetland involvement for this project in the Federal Register on November 9, 2000.

5.7.1 Resource Description

The need and purpose of the project are described in Chapter 1, *Purpose and Need*. Map 4, *Water Resources*, (in Chapter 3) shows locations of floodplains with respect to the alternatives. The locations of the 100-year floodplains were determined from Flood Insurance Rate Maps published by the Federal Emergency Management Agency (FEMA), U.S. Department of Housing and Urban Development.

Wetlands that would be affected by the alternatives were preliminarily identified by three methods: National Wetland Inventory Maps prepared by the USFWS for Washington, aerial photo interpretation, and reconnaissance level field inspections (See Map 4, *Water Resources*, in Chapter 3). A wetland delineation was conducted on the Preferred Alternative to determine the actual boundaries and characteristics of wetland areas.

5.7.2 Floodplain/Wetland Effects

Floodplain impacts are discussed in Section 4.2, *Floodplains and Wetlands*. Based on engineering design of the Preferred Alternative, two floodplains (Wilson/Naneum Creek and Dry Creek) would be impacted. Wilson/Naneum Creek would require a new access road

and a structure within the floodplain. Dry Creek would require a new access road with two 9-foot arch culverts. Soil and vegetation would be disturbed where improvements need to be made to existing access roads within floodplains or new access roads need to be constructed across floodplains. There are no existing access roads to be upgraded within floodplains.

The new access roads and structure within the Wilson/Naneum and Dry Creek floodplains would not significantly increase the risk of flooding or flood damage.

As stated in Section 4.2, *Floodplains and Wetlands*, there are 7 wetlands crossed by the Preferred Alternative. One wetland at Caribou Creek and one at Lower Crab Creek would both be avoided (no impact), wetlands associate with Wilson and Cooke Creeks would have trees removed (moderate impact), an unnamed wetland would have an existing road reconstructed (low impact), a wetland at Wilson/Naneum Creek would have a portion of a new tower constructed (moderate impact).

Construction, operation, and maintenance of the project is not expected to significantly affect the long-term existence, quality, or natural and beneficial values of the wetlands involved. Activities in wetlands would be coordinated with the U.S. Army Corps of Engineers (Walla Walla District) and Washington state and county regulatory agencies. The appropriate permits are being acquired (see Section 5.16).

5.7.3 Alternatives

Under Executive Orders 11988 and 11990, developments on floodplains and in wetlands are discouraged whenever there is a practical alternative. Table 5.7-1, *Possible Floodplain and Wetland Impact Occurrences*, estimates the number of potential floodplain and wetland impact occurrences for each alternative being considered. The magnitude of impact would be determined and site-specific mitigation would be employed to avoid or minimize impacts to floodplain and wetlands.

Table 5.7-1
Possible Floodplain and Wetland Impact Occurrences

Type of Possible Impact	Number of Impacts in Each Alternative			
	Preferred (2)	1	3	1A
Possible crossing of floodplain or wetland requiring a culvert or ford for an access road	2	6	13	4
Structures built in wetland or floodplain, if unavoidable	1*	3	1	3
Areas where tall trees within floodplains or wetlands may be removed	2	4	2	4

* One structure would be within the same floodplain as an access road.

Table has been updated for FEIS.

Wetlands and floodplains that would be crossed by the alternatives are discussed in Section 4.2, *Floodplains and Wetlands*.

Alternatives 1 and 1A would include the same impacts to the floodplains and wetlands as the Preferred Alternative, except for the Dry Creek floodplain, which would not be part of either alternative. No floodplain impacts would occur at Nunnally Lake. Placing structure in the floodplains of Lower Crab Creek and the Columbia River will be avoided if possible. Tree removal may be necessary within wetlands at Nunnally Lake and Lower Crab Creek. Access road crosses may be built within 4 and 2 potential wetlands for Alternatives 1 and 1A respectively. If Alternative 1 or 1A is chosen for construction, wetland delineations would occur to assess actual impacts.

Alternative 3 would include the same impacts to floodplains and wetlands as the Preferred Alternative. No other impacts to floodplains would occur. Eleven other potential wetlands may be crossed by new access roads. Structures would not be placed within wetlands. If Alternative 3 is chosen for construction, wetland delineations would occur to assess actual impacts.

The No Action Alternative is not expected to effect floodplains or wetlands and is discussed in more detail along with the other alternatives in Chapter 2, *Alternatives*.

5.7.4 Mitigation

Mitigation for site-specific impacts is discussed in Section 4.2.8, *Recommended Mitigation*. Included in these mitigation practices are best management practices to minimize erosion, sedimentation, and the spread of noxious weeds. BPA has avoided, to the greatest extent possible, siting structures and new access roads in wetlands or floodplains. BPA conducted a wetland field survey along all access

roads and existing and new ROW, for the Preferred Alternative. Wetlands directly affected by construction were delineated to ensure full compliance with the Clean Water Act. BPA is working with the appropriate agencies to mitigate any actions that would impact the function of wetlands, and will incorporate its mitigation actions in the mitigation action plan.

➔ For Your Information

*The **Executive Order on Environmental Justice** (Executive Order 12898) was enacted in February 1994 to ensure that federal agencies do not unfairly inflict environmental harm on economically disadvantaged and minority groups within the United States or any of its territories.*

5.8 Executive Order on Environmental Justice

The **Executive Order on Environmental Justice** requires federal agencies to identify and address disproportionately high and adverse human health or environmental effects on minority and low-income populations. The U.S. Census Bureau defines minority individuals as those belonging to the following racial or ethnic groups: American Indian or Alaskan Native; Asian or Pacific Islander; Black, not of Hispanic Origin; or Hispanic. EPA Interim Guidelines on Environmental Justice (1998) define low-income as less than two times the poverty threshold/level. These parameters are partial factors in considering whether a potential environmental justice case exists. EPA Interim Guidelines recommend that environmental justice assessments use additional meaningful information and analyses to best determine if disproportionate impacts may result from a proposed action.

U.S. Census block group data for minority populations and populations with income below the poverty level were compared to the respective average county populations. Of the 10 block groups in the study area, four exceeded the county average racial minority population compositions and six exceeded the average Hispanic origin compositions for the respective counties. Two of the ten U.S. Census block groups indicate a higher percentage of individuals with income below the poverty level. Since block group areas extend substantially beyond the study area, additional analyses using aerial photographs were used.

An examination of aerial photographs investigated if residential, commercial, or industrial buildings were present in or near the study area. The results of the examination determined that most of the study area has no buildings of any type present such as when the project alternatives are located on undeveloped, grazed shrub-steppe lands, or public lands. In other areas, such as along agricultural lands in the Preferred Alternative and Alternative 1 (Segments D and E), there are scattered farms and associated homes and outbuildings typical of rural agricultural land use.

From this assessment of demographic data and aerial photography, it is determined that places where minority or low-income populations may reside, work, or otherwise spend large parts of their days are not

highly or disproportionately concentrated within the study area. Alternatives considered for the project would therefore not adversely affect any minority or economically disadvantaged groups. For these reasons, the alternatives would not violate the intent of the Executive Order on Environmental Justice.

5.9 Displacements and Real Property Acquisition

The Uniform Relocation Assistance and Real Property Acquisition Policies Act (Uniform Act) of 1970 (PL 91-646, 42 USC 4601 et seq.) ensures fair and equitable treatment of people whose real property is acquired or who are displaced as a result of a federal or federally assisted project. Government-wide regulations provide procedural and other requirements (appraisals, payment of fair market value, notice to owners, etc.) in the acquisition of real property and provide for relocation payments and advisory assistance in the relocation of people and businesses.

Two residences are expected to be relocated as a result of the Preferred Alternative. One residence is along Segment A and the other residence is along Segment D. Both displacements would be conducted in compliance with the Uniform Act.

BPA would acquire real property for the new Wautoma Substation. This property acquisition would also be conducted in compliance with the Uniform Act.

5.10 Global Warming

The U.S. EPA defines global warming as “the progressive gradual rise of the earth's surface temperature thought to be caused by the greenhouse effect and responsible for changes in global climate patterns” (EPA, 2001). Certain manmade and natural gases absorb and reradiate infrared radiation, which prevents heat loss to space. These gases are known as **greenhouse gases**. Greenhouse gases include water vapor, carbon dioxide methane, chlorofluorocarbons, ozone, and nitrous oxides.

The greenhouse effect is a natural phenomenon that helps regulate the temperature of the Earth. If all of these greenhouse gases were to suddenly disappear, the Earth would be 60°F colder and uninhabitable (EPA 2001). Although global warming occurred in the distant past as the result of natural influences, the term is most often used to refer to the warming predicted to occur as a result of increased emissions of greenhouse gases (EPA, 2001.) Human

For Your Information

*Gases contributing to global warming are called **greenhouse gases**. Greenhouse gases include: water vapor, carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), ground level ozone (and the pollutants which generate ground level ozone), and stratospheric ozone depleting substances such as chlorofluorocarbons and carbon tetrafluoride. CO₂ is the most common greenhouse gas in the atmosphere. Greenhouse gases warm the atmosphere by absorbing infrared radiation given off by the earth, preventing heat loss to outer space.*

activities that contribute to global warming include burning coal, oil, and gas, and cutting down forests.

Occasional trees or woody shrubs would be cleared that would release CO₂ and would eliminate CO₂-collecting vegetation; however, this would occur on a very small scale. To dispose of any cleared vegetation, it would be lopped and scattered on the ROW. This vegetation would then gradually degrade, releasing small quantities of carbon to the atmosphere over long periods of time. BPA does not expect to conduct any outdoor burning. Exceedingly low or no impact to global warming would occur from the project as a result of clearing or recycling vegetation.

5.11 Coastal Zone Management Consistency

The Coastal Zone Management Program is authorized by the Coastal Zone Management Act of 1972 and administered at the federal level by the National Oceanic and Atmospheric Administration's Office of Ocean and Coastal Resource Management, Coastal Programs Division. Management of the program is delegated to the states participating in the program. In Washington, WDOE administers the program. The Coastal Zone Management Act requires that federal development projects and activities directly affecting the coastal zone, "shall be conducted in a manner which is, to the maximum extent practicable, consistent with approved state management programs" (Section 307(c)(1), (2). Consistency with the state program is described below.

5.11.1 Shoreline Management Act

In Washington, the Coastal Zone Management Act is carried out by the Shoreline Management Act. The Shoreline Management Act applies to all marine waters, streams, and a mean annual flow greater than 20 cubic feet per second (cfs), and lakes 20 acres or larger, as well as associated wetlands and floodplain areas.

The project would cross one river, two creeks, and one lake that are designated as shorelines of the state: the Columbia River in Kittitas, Grant, and Benton Counties; Naneum Creek in Kittitas County; and Nunnally Lake and Lower Crab Creek in Grant County.

Any applicant for a federal license or permit to conduct an activity in the Coastal Zone must certify that their project is consistent with the enforceable provisions of the state's Coastal Zone Management Plan. BPA would prepare either a consistency or a negative declaration, as required by the Coastal Zone Management Act.

5.12 Energy Conservation at Federal Facilities

Any modifications to the Schultz, Vantage, and Hanford Substations would not require the addition of new structures, such as control houses, but would use those already in existing substations. All alternatives using these substations therefore involve the continued use of buildings that would meet federal energy conservation design standards as they apply to existing structures.

The new Wautoma Substation would include a new control house that would meet federal energy conservation design standards.

5.13 Pollution Control at Federal Facilities

Several pollution control acts apply to this project and are discussed separately in the following sections.

5.13.1 Resource Conservation and Recovery Act

The Resource Conservation and Recovery Act (RCRA) of 1976 (42 USC 6901 et seq.), as amended, is designed to provide a program for managing and controlling hazardous waste by imposing requirements on generators and transporters of this waste, and on owners and operators of treatment, storage, and disposal (TSD) facilities. Each TSD facility owner or operator is required to have a permit issued by EPA or the state. Typical construction and maintenance activities in BPA's experience have generated small amounts of these hazardous wastes: solvents, pesticides, paint products, motor and lubricating oils, and cleaners. Small amounts of hazardous wastes may be generated by the project. These materials would be disposed of according to state law and RCRA.

5.13.2 Toxic Substances Control Act

The Toxic Substances Control Act (TSCA) of 1976 (15 USC 2601 et seq.) is intended to protect human health and the environment from toxic chemicals. Section 6 of TSCA regulates the use, storage, and disposal of PCBs.

BPA has adopted guidelines to ensure that PCBs are not introduced into the environment. Equipment proposed in any of the alternatives would not contain PCBs. Any equipment removed that may have PCBs would be handled according to the disposal provisions of TSCA.

5.13.3 Federal Insecticide, Fungicide, and Rodenticide Act

The Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) of 1972 (7 USC 136 et seq.) registers and regulates pesticides. BPA uses

herbicides only under controlled circumstances. Herbicides are used on transmission line ROW and in substation yards to control vegetation, including noxious weeds.

When BPA uses herbicides, the date, dose, and chemical used are recorded and reported to state government officials. The herbicides are only used within the prescribed manners and methods as described on their labels. Herbicide containers are disposed of according to RCRA standards.

5.14 Noise Control Act

The Federal Noise Control Act of 1972 (42 USC 4903) requires that federal entities, such as BPA, comply with state and local noise requirements.

The WDOE limits noise levels at property lines of neighboring properties (WAC Chapter 173-040). The maximum permissible noise levels depend on the land uses of both the source noise and receiving property (Table 5.14-1, *Maximum Permissible Environmental Noise Levels*). The environmental designation for noise abatement (EDNA) is defined by the land use of a property. In general, residential uses are Class A, commercial are Class B, and industrial and agricultural are Class C.

Table 5.14-1
Maximum Permissible Environmental Noise Levels

EDNA of Noise Source	EDNA of Receiving Property		
	Class A	Class B	Class C
Class A	55 dBA	57 dBA	60 dBA
Class B	57	60	65
Class C	60	65	70

Source: WAC 173-60-040

Several exemptions apply to the project construction, operation, and maintenance (WAC 173-60-050). Sounds created by the installation or repair of essential utility services are exempt in all EDNAs between the hours of 7 a.m. and 10 p.m. Noise from electrical substations are exempt in all EDNAs and are without time restrictions. Sounds originating from temporary construction sites are exempt from noise limits except from 10 p.m. to 7 a.m. in residential areas.

A new transmission line in Washington state would not increase the ambient audible noise level along the transmission line route or in any of the substations. Installation, construction, and maintenance of the transmission line would comply with state noise regulations.

5.15 Emission Permits under the Clean Air Act

5.15.1 Class I – Protected Areas

The Federal Clean Air Act as revised in 1990 (PL 101-542, 42 USC 7401) requires the EPA and states to carry out programs intended to ensure attainment of the National Ambient Air Quality Standards. In Washington, EPA has delegated authority to WDOE.

Section 160 of the Clean Air Act requires the protection, preservation, or enhancement of air quality in national parks, wilderness areas, and monuments. The 1977 Clean Air Act amendments called for a list of existing areas to be protected under Section 160. These are called Class I areas (40 CFR 81 Subpart D). No Class I areas are located in or near the study area (see Section 3.13, *Air Quality*).

5.15.2 Permits for Open Burning

The state of Washington regulates outdoor burning. The purpose of this rule (173-425 WAC) is to eliminate open burning during periods of impaired air quality and in PM₁₀ and carbon monoxide nonattainment areas as well as in populated regions. BPA does not expect to conduct any outdoor burning.

5.15.3 Fugitive Dust

Controlling fugitive dust, or dust that is emitted from a source such as a construction site, is important in each of the four counties the proposed alternatives pass through. Prior to construction in Yakima County, a Project Dust Control Plan must be prepared and submitted to the Yakima Regional Clean Air Authority. In Kittitas, Grant, and Benton (outside the Tri-Cities urban area) Counties, submittal of a project dust control plan to the respective air authority is not required prior to construction. However, the Washington Administrative Code (WAC 173-400-040-(3)) requires that “reasonable precautions” be taken to prevent the release of air contaminants during construction. If a fugitive dust problem is present, the air authority may request a review of the Project Dust Control Plan and determine the necessary measures to correct the problem.

5.15.4 General Conformity Rule

The General Conformity Rule (40 CFR Part 51, Subpart W, 40 CFR Part 93 Subpart B, and 40 CFR Section 6.303) ensures that federal actions do not interfere with state programs to improve air quality in nonattainment areas. Because none of the alternatives are within a

nonattainment area, they are not subject to General Conformity Requirements.

For Your Information

*The **Clean Water Act** is also known as the federal Water Pollution Control Act.*

5.16 Discharge Permits under the Clean Water Act

The **Clean Water Act (CWA)** regulates discharges into waters of the United States. Several sections of the CWA apply to the project as further described.

5.16.1 Section 401

Section 401 of the CWA requires that states certify compliance of federal permits and licenses with state water quality requirements. A federal permit to conduct an activity that results in discharges into waters of the United States is issued only after the affected state certifies that existing water quality standards would not be violated if the permit were issued. The Washington Department of Ecology would review each permit for compliance with state water quality standards.

5.16.2 Section 402

Section 402 of the CWA authorizes stormwater discharges associated with industrial and construction activities under the NPDES. In Washington, EPA has a general permit authorizing federal facilities to discharge stormwater from construction activities disturbing land of 1 or more acres into waters of the U.S., in accordance with various set conditions. BPA would comply with the appropriate conditions for this project, such as issuing a Notice of Intent to obtain coverage under the EPA general permit and prepare a Storm Water Pollution Prevention (SWPP) plan.

The SWPP plan helps ensure that erosion control measures would be implemented and maintained during construction. The SWPP plan would address best management practices for stabilization, stormwater management, and other controls (see Section 4.1.4, *Recommended Mitigation*).

5.16.3 Section 404

Authorization from the U.S. Army Corps of Engineers is required in accordance with the provisions of Section 404 of the CWA when there is a discharge of dredged or fill material into waters of the U.S., including wetlands. This includes excavation activities that result in the discharge of dredge material that could destroy or degrade waters of the U.S.

BPA has applied for permits to cross 27 waters of the U.S. with a combination of fords and culverts. Twenty-one of these crossings are existing crossings that are being reconstructed or upgraded. Six crossings are new. Construction, operation, and maintenance of the project is not expected to significantly affect the long-term existence, quality, or natural and beneficial values of the wetlands involved.

5.17 Underground Injection Permits under the Safe Drinking Water Act

The Safe Drinking Water Act of 1974 (42 USC sec 300f et seq.) is designed to protect the quality of public drinking water and its sources. BPA would comply with state and local public drinking water regulations. None of the alternatives would affect any sole-source aquifers or other critical aquifers or adversely affect any surface water supplies.

5.18 Permits from the U.S. Army Corps of Engineers

The U.S. Army Corps of Engineers administers several permit programs, of which Section 404 of the Clean Water Act would apply. Section 404 is described in Section 5.16.3, *Section 404*.

The Corps' authorization is also required under Section 10 of the Rivers and Harbors Act for work or placement of structures below the ordinary high-water mark of, or affecting, navigable waters of the U.S. All of the alternatives would cross the Columbia River, which is a navigable water. Although no structures would be placed below the ordinary high water mark, the navigability of the Columbia River could be affected. BPA would submit an application to the Corps for a River and Harbor Act Section 10 permit. The Corps also authorizes the acceptable clearances for conductors crossing navigable waters. BPA would coordinate with the Corps to get conductor height approval.

5.19 Crossing State Lands

5.19.1 Department of Natural Resources (DNR)

Each alternative would cross lands and aquatic resources administered by DNR. The lands, for which there are no specific land management plans, are considered transition lands and have been designated for agricultural purposes. They are managed for the highest and best land use, which may be as agricultural crop fields or as open rangeland (G. Sheldon, 2001). State-owned aquatic

resources are managed for long-term ecosystem and economic viability.

DNR's policy is to issue upland ROW easements for transmission lines crossing DNR lands and aquatic leases for crossing state-owned aquatic resources. The sale or granting of such easements across state lands is subject to review under the State Environmental Policy Act (SEPA). DNR may adopt an environmental analysis prepared under NEPA by following WAC 197-11-600 and WAC 197-11-630 (WAC 97-11-610) or may prepare separate documents in accordance with SEPA regulations.

5.19.2 Washington Department of Fish and Wildlife (WDFW)

Alternative 1A would cross the western edge of the Lower Crab Creek Wildlife Area, which is administered by WDFW. There are no specific management plans for this area. However, as a general rule the area is managed according to wildlife priorities, with preserving endangered species habitat and priority wildlife habitat as the first two land use management priorities. Other land use activities are permitted in those areas where such activities are deemed compatible with the preservation efforts (R. Kent, pers. comm., 2001).

WDFW's policy is to issue upland ROW easements for transmission lines crossing WDFW lands.

5.20 Crossing Federal Lands

5.20.1 U.S. Bureau of Land Management

Prior to construction of the new transmission line on BLM-administered lands, BPA would obtain right-of-way from the BLM. BLM must approve and issue a Right-of-Way Grant authorizing the construction and maintenance for the new transmission line. Typically, a Plan of Development is submitted with the Right-of-Way Application that thoroughly describes the project and its associated impacts. A Temporary Use Permit would also be obtained for additional area necessary for construction, material stockpiling, access, and so forth.

5.20.2 Yakima Training Center (YTC)

A permit to construct and operate a transmission line across the YTC would be required.

5.20.3 USDOE Approvals

USDOE must give approval to projects that cross the Hanford Site, which includes issuing a real estate permit for the new right-of-way. A Use Request is submitted to the Real Estate Officer (REO), who determines if the project is an Allowable Use or a Special Use. If it is a Special Use, the REO submits it to the Site Planning Advisory Board (SPAB) for approval, approval with conditions or denial. If the project is an Allowable Use, or a Special Use that the SPAB recommends for approval, the REO coordinates the Use Request processing with the NEPA compliance officer. The NEPA compliance officer reviews and approves the EIS and coordinates with other permit processes, including SEPA.

5.20.4 U.S. Fish and Wildlife Service (USFWS)

USFWS must issue a ROW easement for the project to cross the Columbia National Wildlife Refuge. A determination of compatibility with the Refuge System or purpose of the refuge per the National Wildlife Refuge System Improvement Act (50 CFR Parts 25-29) must be obtained (see Appendix L, *National Refuge Determination of Compatibility*).

5.20.5 U.S. Bureau of Reclamation (BOR)

The BOR and the BPA entered into a Memorandum of Understanding (MOU) in 1944 that allowed BPA to construct transmission lines across BOR lands and canals. To obtain permission for the project (the Preferred Alternative and Alternatives 1 and 1A) to cross BOR lands and canals, BPA would have to submit a map and narrative describing the location of the proposed route. BOR would then write a supplement to the 1944 MOU that would allow the construction and operation of the transmission line. Both the Yakima office and the Ephrata office would need to be contacted to conduct these MOU supplements.

5.21 Notice to the Federal Aviation Administration

As part of transmission line design, BPA seeks to comply with FAA procedures. Final locations of structures, structure types, and structure heights are submitted to FAA for the project. The information includes identifying structures taller than 200 feet above ground and listing all structures within prescribed distances of airports listed in the FAA airport directory. BPA also assists the FAA in field review of the project by identifying structure locations. The FAA then conducts its own study of the project, and makes

recommendations to BPA for airway marking and lighting. General BPA policy is to follow FAA recommendations.